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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,027	01/02/2002	Dennis William Mount	Chem Champ *1	9152

7590

10/27/2004

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EXAMINER

BHAT, NINA NMN

ART UNIT PAPER NUMBER

1764

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,027

Applicant(s)

MOUNT, DENNIS WILLIAM

Examiner

N. Bhat

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 17-22, 32, 33, 52 and 54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-16, 23-31, 34-51 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's IDS of 5-2-2002 has not been considered fully because the scanning of the original IDS filed is not clear and a new copy of the IDS preferably typed is required. Attached is the copy IDS which has been scanned in the PTO IFW system, there are patent numbers which are indiscernible. Accordingly, the examiner has signed the bottom of the 1449, but has not initialed next to the references. A new legible PTOL 1449 is required.
2. Claims 9, 10-12, 17-20, 22, 32, 33, 52 and 54 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend on another multiply dependent claims. See MPEP § 608.01(n). Accordingly, the claims 9, 10-12, 17-20, 22, 32-33, 52 and 54 have not been further treated on the merits.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-8, 13-16, 21, 23-31, 34-51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann.

Baumann teach a process and apparatus for recovering a pure solvent from a contaminated solvent, the process feeding contaminated solvent to an evaporator and separating the solvent from the contaminants that have a higher boiling point than the solvent by evaporation in the evaporator to produce a vapor stream of solvent which leaves the top of the evaporator while the high boiling contaminants remain in the liquid state in the bottom of the evaporator, directly feeding the vapor to a condenser and condensing the solvent by partial condensation while the contaminants which have a lower boiling point than the solvent remain in the vapor stream, removing condensed solvent from the bottom of the condenser as a liquid stream and uncondensed vapor containing the lower boiling point contaminants from the top of the condenser as a vapor stream, and regulating the temperature of the vapor stream leaving the condenser and temperature of the condensed solvent liquid stream leaving the condenser independently of each other by means of a closed separate cooling circuit. The coolant which enters the condenser at the same end as the vapor stream leaves the condenser are the same as the condensed liquid solvent stream, by adjusting the temperature of the coolant entering the condenser in accordance with the temperature of the vapor stream leaving the condenser to maintain the temperature a pre-

determined set point then adjusting the flow rate of the coolant flowing through the condenser.

However, Baumann does use heat-absorbing mass within the condenser.


It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a solvent recovery system comprising a distillation chamber for the solvent, heating means, direct condensation means and means to direct the vapor from either the condenser or evaporator which further includes a vapor management module which treats the vapor from the condenser, this concept has been fully taught by Baumann, although Baumann does not teach using a heat absorbing means, Baumann does teach that transit of particles from the evaporator to the condenser can be avoided by using a layer of filter material within the evaporator. The filter layer can consist on lone or more wire meshes and a between a metal wool fleece, the filter layer can be self-supporting or can be borne by a support device within the evaporator, the filter of Baumann could be functionally equivalent to the heat absorbing means claimed by applicant therefore rendering applicant's solvent recovery system, include a distillation module, direct condensation module, and vapor management module as claimed obvious to one having ordinary skill in the absent criticality in showing.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoover teaches a spent solvent purification apparatus. Drostholm et al. teach an integrated apparatus for distilling batches of contaminated solvents. Gustafsson teach a method for controlling the flow through a distillation apparatus and a device for carrying out the method.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


N. Bhat
Primary Examiner
Art Unit 1764
